77. The method according to claim 76, wherein said vertebrate cell is a mammalian cell.

78. The method according to claim 77, wherein said mammalian cell is a human cell.

79. The method according to claim 76, wherein said vector comprises inverted terminal repeat sequences flanking said polynucleotide encoding said protein.

80. The method according to claim 79, wherein said inverted terminal repeat sequences are derived from adeno-associated virus.

81. The method according to claim 76, wherein said promoter sequence is capable of driving expression of said polynucleotide encoding said protein.

82. The method according to claim 81, wherein said promoter sequence is selected from the group consisting of a CMV promoter sequence and herpes TK promoter sequence.

83. The method according claim 76, wherein said protein encoded by said polynucleotide is selected from the group consisting of interleukins, cytokines, growth factors, interferons, enzymes and structural proteins.

84. The method according to claim 76, wherein said vector is introduced into said vertebrate cell by infection in a viral particle.

85. The method according to claim 76, wherein said vector is introduced into said vertebrate cell by means selected from the group consisting of transfection, transduction and injection.

86. The method according to claim 76, wherein said vector is introduced into said vertebrate cell *in vitro*.

87. The method according to claim 76, wherein said vector is introduced into said vertebrate cell *in vivo*.

88. The method according to claim 76, wherein said polynucleotide encoding said protein is greater than about 10 kb in size.

89. The method according to claim 76, wherein said polynucleotide also encodes a selectable marker protein.

90. A recombinant entomopox virus vector comprising a polynucleotide encoding a protein operably linked with a heterologous promoter sequence.

91. The vector according to claim 90, wherein said heterologous promoter sequence is not a pox virus promoter sequence.

92. The vector according to claim 90, ~~wherein said entomopox virus is~~ *Amsacta moorei* entomopox virus.

93. The vector according to claim 90, wherein said vector comprises inverted terminal repeat sequences flanking said polynucleotide encoding said protein.

94. The vector according to claim 93, wherein said inverted terminal repeat sequences are derived from adeno-associated virus.

95. The vector according to claim 90, wherein said heterologous promoter sequence is capable of driving expression of said polynucleotide encoding said protein.

96. The vector according to claim 95, wherein said heterologous promoter sequence is selected from the group consisting of CMV and herpes TK.

97. The vector according to claim 90, wherein said protein encoded by said polynucleotide is selected from the group consisting of interleukins, cytokines, growth factors, interferons, enzymes and structural proteins.

98. The vector according to claim 90, wherein said polynucleotide encoding said protein is greater than about 10 kb in size.

99. The vector according to claim 90, wherein said polynucleotide also encodes a selectable marker protein.

100. A viral particle comprising the vector of claim 90.

101. A cell comprising a recombinant entomoxpox virus vector comprising a polynucleotide encoding a protein operably linked with a heterologous promoter sequence.

102. The cell according to claim 101, wherein said cell expresses said protein encoded by said polynucleotide.